## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-146

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1996 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas or Liquid Natural Gas (CNG or LNG)

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TCE359D1CAAW (493A)	5.9	(359)	Oxidation Catalytic Converter Turbocharger Charge Air Cooler Engine Control Module Heated Oxygen Sensor

Engine models and codes are listed on attachments.

The certification exhaust emission standards for this engine family in grams per brake horsepower-hour are:

Non-Methane	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
1.2	15.5	5.0	0.10

The certification exhaust emission values for this engine family in grams per brake horsepower-hour are:

Engine	Non-Methane	Carbon	Nitrogen	<u>Particulates</u>
<u>Family</u>	<u>Hydrocarbons</u>	<u>Monoxide</u>	_Oxides	
TCE359D1CAAW (493A)	0.6	8.5	0.9	0.02

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this  $\frac{27}{200}$  day of November 1995.

R. B. Summerfield Assistant Division Chief Mobile Source Division

E.O.#	A.	-21	- 14	16
-------	----	-----	------	----

Page <u>1</u> of <u>1</u>

## 199<u>6</u> AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer Cur	nmins Engine Co	ompany, Inc.	Engine Family	(493A) TCE359	DICAAW_	
Displacement: / 5.9 Liters / 359 Cubic Inches						
Maximum Rated Power: 195 HP @ 2800 RPM Engine Configuration: I-6						
Ignition: Compression Compression with Glow Plug Spark_X						
Fuel Type(s): Dec	dicated X	Flex-Fuel_	Dual-Fuel_	Diesel_ N	M100_ M	185_
		CNG <u>X</u>	LNG <u>X</u> LPG	Other (spe	ecify)	
Diesel Cert Fuel: 13 CCR 2282 40 CFR 86.1313-90 40 CFR 86.1313-94						
Primary Intended	Service Class: L	.HD	MHD <u>X</u>	HHD	Urt	oan Bus_
Exhaust ECS (incl	ude.MFI, TC, C	AC):	$\Lambda_{,OC,(TC,CAC)}$	, HO2S		
			· · · · · · · · · · · · · · · · · · ·	ons per SAE J193		
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate  @ Rated HP  mm3 / stroke  (lbs/hr)	1 -	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
B5.9-195G (1683)	195 @ 2800	(70)	N/A	3922724	N/A	3927832
	L systems ① 30FF8 ② 30961	Fol LNG 27 / LNG 49 / LNG	APP(ICATION) W Ful system Ful system	vey use th	E FOLLOW	in part numbers
Date Issued:						
Revisions:						